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(54) Title: ANGIOGENIC AGENTS FROM PLANT EXTRACTS, GALLIC ACID, AND DERIVATIVES

(57) Abstract: An extract of Chinese blackberry (Rubus suavissimus) has been found to inhibit angiogenesis, and two active fractions isolated. Gallic acid was shown to be one of the active anti-angiogenic compounds by an *in vitro* human angiogenesis model. Aqueous extracts from other plants either known or found to have gallic acid were also found to have anti-angiogenic activity. Various derivatives of gallic acid were found to inhibit angiogenesis. The extract from Chinese blackberry also slowed the growth of a panereatic tumor and of corneal neovascularization in rats. Extracts from pomegranate were shown to inhibit angiogenesis in fat tissue. Extracts from Rubus spp, and other plants with gallic acid, and gallic acid and its derivatives will be useful for treating various diseases associated with neovascularization, including diabetic retinopathy, psoriasis, tumors, obesity, cancer, rheumatoid arthritis.

